APPENDIX C
BOMB DAMAGE REPAIR MATRIX

DAMAGED FACILITY	DESCRIPTION OF DAMAGE	FACILITY NO.	TITLE	REMARKS
Airfield pavements: runway, taxiway, or apron	Three 50-foot-diameter craters were caused by 750-lb bombs.	11150AF	Rapid runway repair using AM-2 matting (three craters).	Repair consists of the following: (1) Remove fractured pavement around craters, (2) replace and compact ejecta in craters, (3) place and compact select fill on ejecta, (4) place AM-2 surfacing over filled craters, (5) anchor surfacing to existing pavement. Three AM-2 landing mat repair kits are furnished in facility. Each kit will surface a 4,185-square-foot area.
Airfield pavements: runways, taxiway, or apron	Three 50-foot-diameter craters were caused by 750-lb bombs.	11150AG	Bomb damage repair to U.S. Air Force runways, taxiways, and aprons (three craters) 1,260 square yard.	Repair consists of the same procedure as listed for facility no. 11150AF, except that British class 60 trackway is substituted for the AM-2 landing mat. Sections of trackway 52.4-foot-wide by 72-foot-long are furnished in bundles that are 52.4 feet wide and have a diameter of 4.1 feet.
Fixed-position refueling station for aircraft	Refueling station was completely destroyed.	12110AB	Bomb damage repair of aircraft fuel-dispensing facilities.	The refueling system is replaced with a self-contained module that consists of a pump unit and two 50,000-gallon collapsible tanks.
50,000-barrel POL storage tank	Storage tank was completely destroyed.	12110AE	Bomb damage repair of POL storage facilities.	The damaged facility is replaced with bladder-type tanks at a new location.
8-inch-diameter POL pipeline	200 linear feet were destroyed.	12520AA	Bomb damage repair of POL Pipeline, 8-inch.	The 200 feet of damaged pipeline are removed and replaced with new pipe.
6-inch-diameter POL pipeline	200 linear feet were destroyed.	12520AB	Bomb damage repair of POL pipeline, 6-inch.	The 200 feet of damaged pipeline are removed and replaced with new pipe.
4-inch-diameter POL pipeline	200 linear feet were destroyed.	12520AC	Bomb damage repair of POL pipeline, 4-inch.	The 200 feet of damaged pipeline are removed and replaced with new pipe.
Runway lighting system	The runway lighting system was destroyed, or a lighting system is required for a temporary runway.	13610AA	Bomb damage repair to airfield runway lighting.	The facility provides an expedient lighting system for 8,000 linear feet of runway or taxiway lighting. If necessary, the system will require two 30-kW ac generators (NSN 6115-00-118-1240).
Aircraft revetment	Total or partial destruction of aircraft revetment.	14910AA	Bomb damage repair of revetments.	The facility provides materials for construction of 384 linear feet of steel bin-type revetment walls. 1,920 cubic feet of local earth fill are required. Design of the facility permits flexibility of its final configuration.
Aircraft arresting barrier	Arresting barrier system was destroyed.	14920AA	Bomb damage repair of aircraft arresting barrier.	The facility contains a BAK-12 arresting barrier that includes an engaging device and energy absorbers.

DAMAGED FACILITY	DESCRIPTION OF DAMAGE	FACILITY NO.	TITLE	REMARKS
1,200-foot-long by 90-foot-wide commercial cargo pier (wood piles, wood deck)	Three 750-lb bombs hit the pier, with damage as follows: (1) A 100-foot by 50-foot section located on port side was completely destroyed, (2) a 110-foot by 50-foot section located at the end on the starboard side was completely destroyed, (3) a 100-foot-diameter section located in the center was completely destroyed.	15150AD	Bomb damage repair to a commercial cargo pier.	The destroyed sections located on the port and starboard side are cleaned of debris and barricaded to prevent accidents. The center section is cleaned of debris, and two bailey bridges are erected across the gap to provide simultaneous traffic in two directions.
1,200-foot-long by 70-foot-wide wharf constructed on wood piles and decked with reinforced concrete	Three 750-lb bombs hit the wharf, with damage as follows: (1) A 50-foot-diameter area located in the center of the wharf was completely destroyed, (2) two 50-foot-diameter areas located on the far shore were destroyed. Varying degrees of destruction also occurred up to 1,000 feet from where the bombs exploded.	15250AU	Bomb damage repair of cargo wharf.	Debris is removed from the wharf. Barriers and curbing are placed around the destroyed areas to prevent accidents. New dolphins are driven at each end of the wharf to replace the damaged dolphins.
400-foot-long vehicle-bridge over a river	Bridge was completely destroyed.	85120KR	Bomb damage repair of bridge over a 300- to 400-foot-wide river: Replace with ribbon bridge (includes approaches) 400-foot gap.	A floating ribbon bridge is constructed to replace the bomb-damaged bridge.
110-foot-long vehicle-bridge over a river or ravine	Bridge was completely destroyed.	85120KT	Bomb damage repair of a fixed bridge, 110-foot gap or less.	A double single-lane bailey bridge is used to replace the bomb-damaged bridge.
Single-track railroad system	Damage consists of a 25-foot-diameter 10-foot-deep crater, with approximately 50 linear feet of railroad track damaged on each side of the crater.	86010AD	Bomb damage repair of single-track railroad system. Damage is one crater (25 feet) plus twisted track for 50 feet on each side of crater.	Debris is removed from the area, ejecta is replaced and compacted into the crater, and new ties and tracks are installed.
Single-track railroad bridge	A 40-foot-long span of the bridge and substructure was destroyed.	86030TP	Bomb damage repair to a railroad bridge, one 40-foot four-beam span and one 30-foot pier.	Assume that the abutments and pier foundations did not receive significant damage. Repair consists of the following: (1) Clear site of debris, (2) construct 30-foot pier, (3) erect 40-foot-span section, (4) lay ties and rails.